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T.P.W.D. TEAM

NOT TO SCALE

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PROJECT

ABILENE STATE PARK POOL COMPLEX ROOF REPLACEMENTS

PROJECT NO: MR10940 DATE: 03/15/2021

INDEX OF DRAWINGS

SHEET NO. DESCRIPTION

SYMBOLS, NOTES, ABBREVIATIONS, SUBMITTAL TABLE, & SPECIFICATIONS

PLANS & PHOTOS

SINGLE PLY MEMBRANE DETAILS

SHINGLE DETAILS

BUILDING CODE SUMMARY

A. INTERNATIONAL CODE COUNCIL ADOPTIONS*

1. BUILDING CODE INTERNATIONAL BUILDING CODE 2015 2. STRUCTURAL CODE INTERNATIONAL BUILDING CODE 2015

INTERNATIONAL PLUMBING CODE 2015 4. MECHANICAL CODE INTERNATIONAL MECHANICAL CODE 2018

6. RESIDENTIAL CODE INTERNATIONAL RESIDENTIAL CODE 2015 7. EXISTING BUILDINGS INTERNATIONAL EXISTING BUILDINGS CODE 2015

^k International Fire Code omitted in lieu of TPWD's implementation of National Fire Protection Association codes. International Energy Conservation Code 2015 omitted in lieu of Energy Standard for Buildings, ASHRAE/IESNA Standard 90.1 (2013).

B. NATIONAL FIRE PROTECTION ASSOCIATION 1. ELECTRICAL CODE NATIONAL ELECTRIC CODE, NFPA-70 2020

3. LIFE SAFETY CODE NFPA - 101 2015 C. STATE ENERGY CONSERVATION OFFICE (SECO)/TEXAS COMPTROLLERS OFFICE

ards: Texas Administrative Code Title 34 Part 1 Ch 19 Subchanter C

See SECO website for State Funded Buildings, New Construction and Major Renovation Requirements and SECO Compliance Certification Forms

SCOPE OF WORK

CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT, TOOLS, MATERIALS, AND INCIDENTALS NECESSARY TO REMOVE THE EXISTING ROOFS AND INSTALL NEW ROOFS ON THE POOL HOUSE AND PAVILION. WORK SHALL INCLUDE DEMOLITION, CARPENTRY, METAL WORK AND ROOFING --BOTH WOOD SHINGLE AND SINGLE PLY MEMBRANES.

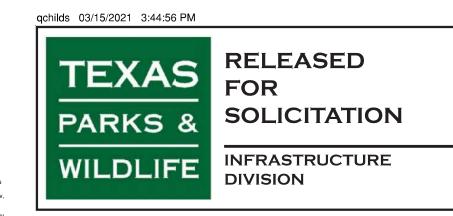


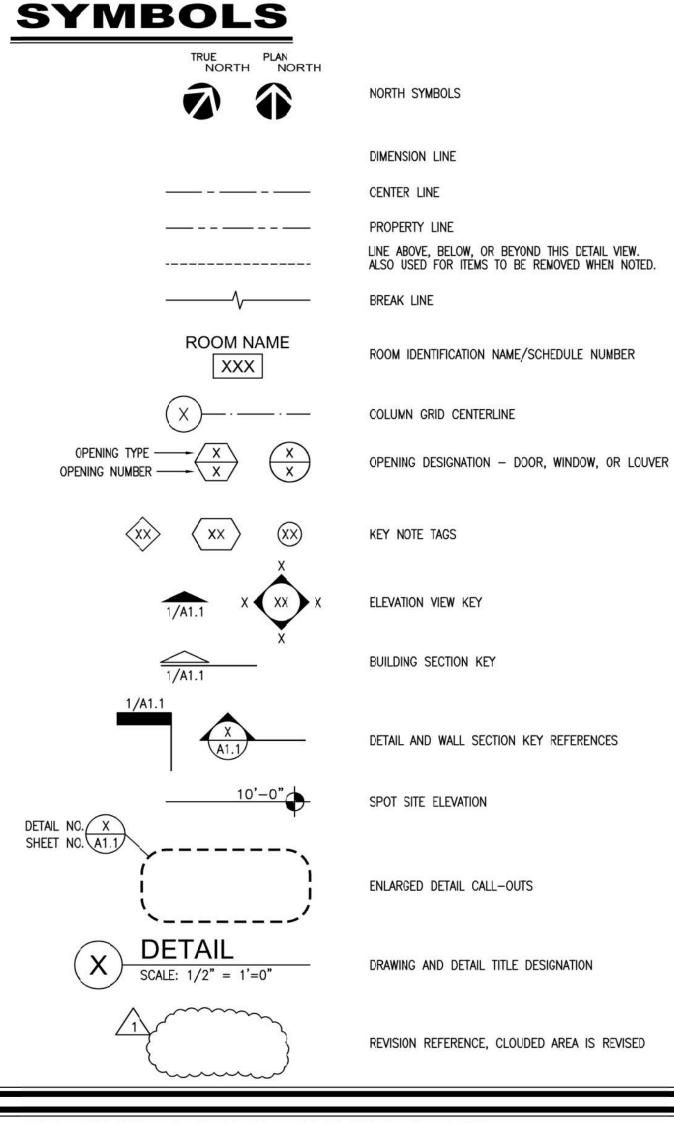
TEXAS PARKS AND WILDLIFE

INFRASTRUCTURE DIVISION

4200 SMITH SCHOOL ROAD · AUSTIN, TEXAS 78744-3292







ABOVE FINISH FLOOR MINIMUM ALSO KNOWN AS METAL N.A. NOT APPLICABLE ALUMINUM THE ENGINEERED WOOD ASSOCIATION ® N.I.C. NOT IN CONTRACT ASTM INTERNATIONAL NATIONAL ROOFING CONTRACTORS ASSOC. BOARD ON CENTER OWNERS DESIGNATED REPRESENTATIVE BLOCKING 0.H. **OVERHEAD OPPOSITE** BOTTOM ORIENTED STRAND BOARD CIVILIAN CONSERVATION CORPS OUTSIDE FACE EXTERIOR PLYWOOD W/ C-D APPEARANCE PLATE HEIGHT PLUMBING CENTER LINE PLYWD. PLYWOOD CEILING POLYISOCYANURATE COLUMN PRESSURE TREATED CONC. CONCRETE POLYVINYL CHLORIDE CONTINUOUS REFLECTED CEILING PLAN CEDAR SHAKE&SHINGLE BUREAU CSSB REINFORCEMENT BAR CUBIC YARD REFERENCE REINFORCEMENT DIAMETER REQ'D. REQUIRED DIMENSION BIT. STYRENE-BUTADIENE-STYRENE MODIFIED BITUMEN DETAIL SAFETY DATA SHEET DIRECT TO METAL SIMILAR EACH SPECIFICATIONS EXPANSION JOINT SPF SPRAY POLYURETHANE FOAM ELECTRICAL SPM SINGLE-PLY MEMBRANE **ELEVATION** SQUARE **EQUAL** STAINLESS STEEL EXISTING STEEL FINISH FLOOR TEMP. TEMPORARY FINISH TONGUE & GROOVE FOCT OR FEET TOP OF WALL **GAUGE** T.P.O. THERMOPLASTIC OLEFIN **GALVANIZED** TEXAS PARKS & WILDLIFE DEPT. TPWD HOLLOW METAL **HEIGHT** UNDERWRITERS LABORATORY HEATER UNLESS OTHERWISE NOTED HORIZONTAL VERIFY IN FIELD HEX WASHER HEAD VERTICAL **VERT** INSULATION VENT THROUGH ROOF KETONE ETHYLENE ESTER POUNDS LIGHT

ABBREVIATIONS

MECHANICAL

ANCHOR BOLT

GENERAL NOTES

A. SELECTIVE DEMOLITION NOTES:

- THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, TOOLS, MATERIALS, AND INCIDENTALS NECESSARY TO PERFORM ALL OPERATIONS INVOLVED IN THE REMOVAL, TRANSPORT, STORAGE OR DISPOSAL OF VARIOUS REMOVED BUILDING MATERIALS AND DEBRIS AND COMPLY WITH ALL APPLICABLE LAWS REGULATING DISPOSAL.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OWNER'S PROPERTY THAT MAY BE DAMAGED BY DEMOLITION AND SHALL PROVIDE AND MAINTAIN ALL METHODS OF NECESSARY PROTECTION. RESTORE ANY DAMAGED WORK TO ORIGINAL CONDITION.
- 3. THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS DURING DEMOLITION SO AS NOT TO DAMAGE ANY MECHANICAL OR ELECTRICAL ITEM REQUIRED TO REMAIN IN SERVICE, RELOCATED OR BE INCORPORATED INTO THE WORK.
- PROVIDE ALL NECESSARY BARRICADES, BARRIER WALLS, SHORING, SCAFFOLDING, WARNING SIGNAGE, EXIT SIGNS, ETC. 5. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY WEATHER TIGHT CLOSURES TO SEAL

4. THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTION IN ALL DEMOLITION WORK AND

- OFF ANY ROOF OR WALL OPENINGS IN THE EXISTING BUILDINGS UPON REMOVAL OF EXISTING ROOFING, FLASHINGS, CAPS, ETC. 6. THE CONTRACTOR SHALL TAKE CARE TO AVOID DAMAGE TO ANY PART OF THE BUILDING
- STRUCTURE. NOTIFY THE OWNER AND ARCHITECT IMMEDIATELY OF ANY STRUCTURAL
- 7. CONTRACTOR SHALL PROVIDE AND MAINTAIN FOR ALL FALL PROTECTION PROVISIONS. PER OSHA REQUIREMENTS.
- 8. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER SO AS TO MINIMIZE INTERRUPTION OF PARK OPERATIONS OR ACTIVITIES.
- 9. THE CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND LIGHTS IN ALL WORK AREAS UNLESS NOTED OTHERWISE. SEE SPECIFICATION G .-- CONSTRUCTION SITE.
- 10. THE CONTRACTOR SHALL PROTECT LAWNS AND LANDSCAPES. COORDINATE ALL TREES AND LANDSCAPE PROTECTION WITH THE CONSTRUCTION MANAGER AND PARK SUPERINTENDENT

B. ALTERNATES:

NO ALTERNATES ARE REQUESTED OR ACCEPTED WITH THE BASE BID. ANY NECESSARY CHANGES DISCOVERED DURING THE PROJECT WILL BE HANDLED THROUGH CHANGE ORDERS.

C. EXISTING CONDITIONS:

- 1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS. DIMENSIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE.
- 2. FIELD MEASUREMENTS WILL BE REQUIRED TO COMPLETE THE WORK. THE CONTRACTOR SHALL OBTAIN ALL FIELD MEASUREMENTS AS NECESSARY TO FABRICATE ITEMS OF WORK AND IN ORDER TO COORDINATED WITH AND MATCH NEW CONSTRUCTION TO EXISTING CONDITIONS.
- 3. SOME INFORMATION ON THE DRAWING REGARDING EXISTING FEATURES IS AN EDUCATED GUESS DUE TO UNKNOWN (CONCEALED) CONDITIONS AT THE TIME OF PREPARATION. IF CONDITIONS EXIST THAT DIFFER FROM THE DRAWING OR ARE NOT ADEQUATELY DETAILED. INFORM THE ARCHITECT FOR DIRECTION. EXTRA SKETCHES, DRAWINGS, DETAILS, CLARIFICATIONS. INTERPRETATIONS WITH BE PROVIDED BY THE ARCHITECT. DO NOT PROCEED WITHOUT WRITTEN CLARIFICATION.
- 4. DRAWINGS IN THIS SET ARE NOT TO BE CONSIDERED MEASURED DRAWINGS OF AS-CONSTRUCTED CONDITIONS.

SUBMITTALS TABLE

MAXIMUM

REQUIRED SUBMITTALS PRIOR TO INSTALLATION

MATERIAL OR PRODUCT	MANUFACTURER'S PRODUCT INFO	INSTALLATION INSTRUCTIONS	SAFETY DATA SHEETS	LEGIBLE PHOTO OF MATERIAL	LEGIBLE PHOTO OF INSTRUCTION LABEL	SAMPLE TO ARCHITECT	SAMPLE TO CONSTR. MNG'R.	OTHER / NOTES
MORTAR MIX	YES							photo of color match on wall
EXTERIOR GRADE PLYWOOD	YES							
GUTTERS AND DOWNSPOUTS	YES	YES						color sheet to architect
TOUCH-UP PAINT for FACTORY COATING	YES	either			either			aronnoot
D.T.M.PAINT FOR BARE METAL	YES	either	YES		either	see notes		color sheet to architect
PAINT & PRIMER FOR GALV. METAL	YES	either	YES		either	see notes		color sheet to architect
ASPHALT SATURATED ORGANIC FELT	YES	YES	YES					G. 51111001
ICE-ANC-WA⊺ER DAM MEMBRANE	YES	YES	YES					
CEDAR BREATHER & RAPID RIDGE 7	YES	YES						
FIRE-RETARDANT CEDAR SHINGLES	YES	YES	YES			YES		
FLASHING FOR SHINGLE ROOF	YES					see notes		color sheet to architect
INSULATION BOARDS and ACCESSORIES FOR SPM	YES	YES	YES			110103		drontect
SINGLE PLY MEMBRANE (SPM)	YES	YES	YES					
SAMPLE WARRANTY FOR SPM						YES		
ROOF BOOT	YES	YES						
ROOF DRAIN, if locations are found	YES	YES						if applicable
FLASHINGS FOR SPM	YES	YES						
ADHESIVES FOR SPM.	YES	YES	YES					
OTHER PRODUCTS FOR SPM	YES	YES						
CAULKS	YES	either			either			
ADHESIVES	YES	either	YES		either			
SEALANTS	YES	either	YES		either			
TAPES	YES	either	YES		either			
INSULATION BOARD FASTENERS	YES	YES			·			
NAILS & CAPS FOR UNDERLAYMENTS	YES					YES		
NAILS FOR SHINGLES	YES					YES		
MASONRY FASTENERS	YES					YES		
OTHER FASTENERS	YES					YES		
ACCESSORIES	YES			either				
SPLASH PADS (both types)	either				either			both types
CSSB New Roof Construction Manual								have on site

A. CONTRACTORS LABOR AND MATERIALS WARRANTY CERTIFICATE WITH

MANUFACTURER'S EXTENDED WARRANTIES

INSTRUCTIONS AND CONTACT INFORMATION FOR WARRANTY WORK.

either-- MEANS YOU MUST SEND IN ONE OR THE OTHER.

SPECIFICATIONS

CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT, TOOLS, MATERIALS, AND INCIDENTALS PAVILIONS.. WORK SHALL INCLUDE DEMOLITION, CARPENTRY, METAL WORK, AND ROOFING -- BOTH WOOD SHINGLE AND SINGLE PLY MEMBRANE.

HIGHLY RECOMMENDED: BIDDERS AND CONTRACTORS SHOULD VISIT SITE TO TAKE MEASUREMENTS AND VERIFY SCOPE OF WORK BEFORE BIDDING PROJECT. CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES AND SCOPE OF WORK.

ABILENE STATE PARK IS LOCATED IN TAYLOR COUNTY, SOUTHWEST OF THE CITY OF ABILENE AND NORTHWEST OF THE TOWN OF TUSCOLA, THE PARK ADDRESS IS 150 PARK ROAD 32, TUSCOLA, TX, 79562. SITE HAS DESIGN WIND LOADS OF VULT = 115 M.P.H FOR A TYPE II BUILDING IN EXPOSURE C CONDITIONS. DURING CONSTRUCTION, ANY QUESTIONS CONCERNING SITE ACCESS SHOULD BE DIRECTED TO TPWD CONSTRUCTION MANAGER _____ AT 512-____

ALL WORK

ALL WORK REQUIRED HEREIN SHALL INCLUDE ANY AND ALL APPURTENANT WORK AND ITEMS NECESSARY FOR FULLY FUNCTIONAL AND OPERATIONAL SYSTEM, COMPLETE AND IN PLACE, IN ACCORDANCE WITH THE BIDDING AND CONTRACT DOCUMENTS.

UNLESS OTHERWISE NOTED, MATERIALS SHALL BE NEW; PROVIDED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND WARRANTY REQUIREMENTS.

a. MORTAR FOR REPAIRS AS NECESSARY AT STEP-FLASHING AT STONE WALLS. b. MORTAR TO MATCH EXISTING IN CONTENT AND COLOR. TYPE K MORTAR WITH LOW CEMENT

- a. FLASHING FOR SHINGLE ROOF: THICKNESS: 24 GAUGE OR THICKER. . DIMENSIONS: EAVE AND RAKE WIDTHS TO MATCH EXISTING + ENOUGH TO COVER NEW
- PLYWOOD EDGE. ALL ELSE TO MATCH EXISTING. • FACTORY FABRICATED FLASHINGS: METAL WITH FACTORY APPLIED COATING OF KYNAR 500® OR
- BETTER. COLOR TO MATCH ADJACENT PAINT OR MASONRY. STEP-FLASHING TO MATCH COLOR AND SIZE OF EXISTING STEP FLASHING
- b. FLASHINGS FOR LOW-SLOPE ROOF:
- AS RECOMMENDED OR REQUIRED BY SPM MANUFACTURER. METAL FOR POSSIBLE CURB EXTENSIONS TO BE DETERMINED BASED ON EXISTING CURBS.
- c. GUTTERS AND DOWNSPOUTS:
- NEW GUTTERS TO MATCH EXISTING IN PROFILE AND COLOR, NEW GUTTERS CONTINUOUS FORMED ALUMINUM WITH KYNAR 500[®] COATING OR BAKED ENAMEL
- ROOF DECK MOUNTED GUTTER HANGERS.
- KICK-OUTS AT BOTTOM OF DOWNSPOUTS

CONTENT AND LOCAL SAND ANTICIPATED.

- a. LUMBER: MISCELLANEOUS REPLACEMENT LUMBER TO MATCH EXISTING IN DIMENSIONS AND
- b. V-GROOVE DECKING TO MATCH EXISTING. c. PLYWOOD: FOR NEW DECKING ON TOP OF V-GROOVE: PINE, CDX 3/4" (23/32") THICK.
- PRIMERS, PAINTS, AND COATINGS:
- a. ALL PRIMER TO BE BY SAME MANUFACTURER AS THE PAINT AND BE THE PRIMER RECOMMENDED BY THE PAINT MANUFACTURER.
- b. FOR METAL: TOUCH-UP PAINT: TO MATCH FACTORY APPLIED PAINTS AND COATINGS. ACQUIRE PAINT FROM
- MANUFACTURER. FOR BARE METAL: DTM ACRYLIC ENAMEL EXTERIOR TO MATCH COLOR OF ADJACENT SURFACE. COATING MUST BE CORROSION RESISTANT AND WEATHER RESISTANT. ACCEPTABLE COATINGS
- INCLUDE: SHERWIN WILLIAMS® PRO INDUSTRIALTM DTM ACRYLIC COATING, RUSTOLEUM® NOXYDE® PEGANOX®, OR APPROVED EQUAL OR BETTER. FOR GALVANIZED METAL: CORROSION—RESISTANT PRIMER AND AN EXTERIOR ACRYLIC COATING.
- COATING MUST BE CORROSION RESISTANT AND WEATHER RESISTANT ACCEPTABLE PRIMERS INCLUDE SHERWIN WILLIAMS® PRO INDUSTRIAL™ PRO-CRYL® UNIVERSAL ACRYLIC PRIMER, RUSTOLEUM® MATHYS® PEGALINK®, OR APPROVED EQUAL OR BETTER.

WOOD SHINGLE ROOF UNDERLAYMENTS:

- a. ASPHALT-SATURATED, ORGANIC FELT, NON-PERFORATED, MEETING OR EXCEEDING ASTM D4869 TYPE IV OR ASTM D226 TYPE II. b. WATER-AND-ICE DAM PROTECTION MEMBRANE BY SAME MANUFACTURER AS ASPHALT-SATURATED ORGANIC FELT MANUFACTURER AS RECOMMENDED OR REQUIRED.
- VENTILATED UNDERLAYMENT: CEDAR BREATHER® AND RAPID RIDGE®7 BY BENJAMIN OBDYKE. 8. WOOD SHINGLES:
- a. CERTI-GUARD® FIRE-RETARDANT CEDAR SHINGLES MADE FROM NUMBER 1 GRADE OF CERTIGRADE® ROOF SHINGLES. www.cedarbureau.org b. LENGTH: 18" LONG.
- c. WIDTH: RANDOM WIDTHS NO LESS THAN 4" AND UP TO 14" WIDE.
- d. PRE-MANUFACTURED RIDGE CAP FOR RIDGES AND HIPS.
- Note: FIRE RETARDANT IS EXTREMELY CORROSIVE TO METAL. ALL METAL IN DIRECT WET CONTACT, OR IN CONTACT WITH RUN-OFF FROM SHINGLES TO BE TYPE 316 STAINLESS STEEL, OF COATED WITH KYNAR 500® (OR BETTER), OF COATED WITH A D.T.M. ACRYLIC PAINT COMPATIBLE WITH THE METAL SURFACE. USE TYPE 316 STAINLESS STEEL FASTENERS

LOW-SLOPE ROOF: ALL PRODUCTS TO BE FROM ONE MANUFACTURER'S LINE OF PRODUCTS AND COMPLETE AS RECOMMENDED OR REQUIRED BY MANUFACTURER.

- SINGLE PLY MEMBRANE ROOF. FULLY ADHERED OR MECHANICALLY ATTACHED IS ACCEPTABLE. a. ACCEPTABLE SINGLE-PLY MEMBRANES INCLUDE:
- PVC: MINIMUM 45 MIL THICK 7, MEETING OR EXCEEDING ASTM D4434 TYPE IV, or
- TPO: MINIMUM 60 MIL THICK, MEETING OR EXCEEDING ASTM D6878, or
- KEE: MINIMUM 36 MIL THICK, MEETING OR EXCEEDING ASTM D6754-10 INCLUDE A SEPARATOR SHEET BETWEEN MEMBRANE AND SUBSTRATE.
- b. INCLUDE INSULATION BOARD, TAPERED INSULATION BOARD, COVER BOARDS, CANT STRIPS, SEPARATOR SHEETS, SINGLE-PLY MEMBRANE, FLASHINGS, ADHESIVES, FASTENERS, AND ACCESSORIES, BY THE SAME SINGLE-PLY MEMBRANE MANUFACTURER OR AS RECOMMENDED BY THE SINGLE-PLY MEMBRANE MANUFACTURER. c. FLASHINGS TO BE MIN. 24 GAUGE, UNLESS A THICKER GAUGE IS SPECIFIED BY ROOFING

. CAULKS, ADHESIVES, SEALANTS:

SYSTEM MANUFACTURER.

- a. FASTENERS, TUBES, CAULKS, ADHESIVES, SEALANTS AS RECOMMENDED OR REQUIRED BY
- COMPONENT MANUFACTURERS. b. ASPHALT ROOFING CEMENT: ASBESTOS FREE (ASTM D4586, TYPE II).
- c. ALL CAULKS, SEALANTS, AND ADHESIVES TO BE EXTERIOR GRADE. COLOR TO BE CLEAR, OR MATCH AN ADJACENT COLOR, OR BE PAINTABLE.

- a. FOR LOW-SLOPE ROOF: FASTENERS AS RECOMMENDED OR REQUIRED BY SPM ROOFING MANUFACTURER b. FOR WOOD SHINGLE ROOF:
- FOR ASPHALT-SATURATED FELT; USE ROOFING NAILS WITH PLASTIC CAPS
- FOR FIRE—RETARDANT CEDAR SHINGLES; 316 STAINLESS STEEL 4d "BOX" NAILS. • FOR WOOD NOT TREATED WITH PRESERVATIVE OR FIRE RETARDANT; HOT DIPPED GALVANIZED

SINGLE-PLY SHEET ROOFING MANUFACTURER. SIZED TO FIT PENETRATIONS.

- NAILS OR STAINLESS STEEL NAILS. STAINLESS STEEL OR PRESERVATIVE FASTENERS COMPATIBLE FOR WOOD TREATED WITH
- PRESERVATIVES.

a. VENT BOOTS (aka PIPE BOOTS aka ROOF JACKS); AS RECOMMENDED OR REQUIRED BY

b. ROOF DRAIN ASSEMBLY: AS RECOMMENDED OR REQUIRED BY SINGLE-PLY SHEET ROOFING

12. VENTS AND PENETRATIONS:

13. ACCESSORIES: a. CONDUIT SUPPORTS FOR ELECTRICAL CONDUIT ON ROOF. TYPE AS RECOMMENDED OR REQUIRED

MANUFACTURER. ROOF DRAINS MAY OR MAY NOT EXIST. VERIFY LOCATIONS, OPERATIONS, AND

- PER SPM ROOFING MANUFACTURER. b. LEAK BARRIER, OR NEOPRENE OR RUBBER GASKETS, WASHERS, OR PADS AS NEEDED TO PREVENT METAL-TO-METAL CONTACT OF DISSIMILAR METALS IN WET CONDITIONS.
- c. OTHER ACCESSORIES AS REQUIRED PER MANUFACTURERS INSTRUCTIONS. d. SPLASH PANS/PADS: ON LOW-SLOPE ROOF TO BE FIBERGLASS, RESIN, OR RUBBER.

SPLASHPADS AT PATIO TO BE CONCRETE

E. SUBMITTALS: SEE SUBMITTALS TABLE ON THIS SHEET FOR REQUIRED SUBMITTALS PRIOR TO WORK AND AT CLOSE-OUT.

F. INSTALLATION:

NECESSARY TO REMOVE THE EXISTING ROOFS AND INSTALL NEW ROOFS ON THE POOL HOUSE AND ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND GOOD INDUSTRY PRACTICES, STANDARDS, AND WORKMANSHIP.

SINGLE PLY MEMBRANE ROOF: 1. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS AND DETAILS. EITHER MECHANICALLY FASTENED OR FULLY ADHERED SPM IS ACCEPTABLE, BUT MUST BE APPROPRIATE FOR SITE PER SPM MANUFACTURER. SITE HAS DESIGN WIND LOADS OF VILT = 115 M.P.H FOR A TYPE II BUILDING IN EXPOSURE C CONDITIONS.

- 2. ELECTRICAL CONDUIT LINES ABOVE ROOF TO REMAIN IN PLACE. THERE IS THE POSSIBILITY THAT ELECTRICAL LINES MAY BE ABOVE DECK BUT BELOW ROOFING. USE CAUTION DURING REMOVAL OF EXISTING ROOFS. ANTENNAE, DATA OR PHONE SYSTEMS TO REMOVED AND REINSTALLED BY
- 3. REMOVE EXISTING BUILT-UP ROOF SYSTEM TO WOOD DECK. REMOVE METAL FLASHINGS. TAKING CARE NOT TO DAMAGE STONE WALLS.
- 4. REMOVE AND REPLACE ROTTED OR DAMAGED WOOD TO A MINIMUM OF ONE (1) FOOT BEYOND THE EDGES OF THE COMPROMISED WOOD AND TO THE NEXT RAFTER/JOIST. CUT STRAIGHT EDGES ALIGNED WITH THE RAFTERS BELOW, WITH EDGES SUPPORTED AND SECURED. ASSUME 5% REPLACEMENT.
- 5. INSTALL PLYWOOD OVER ENTIRE CEILING/ROOF DECK. FASTEN AT ALL EDGES AND FIELD INTO RAFTERS BELOW. NO FASTENERS SHOULD SHOW BELOW THE CEILING PLANKS.
- 6. INSTALL COMPLETE ROOFING INSULATION/DRAINAGE SLOPE SYSTEM PER MANUFACTURER'S
- INSTRUCTIONS. a. VERIFY DRAINAGE. SCUPPERS APPEAR TO BE ONLY WATER REMOVAL LOCATIONS, BUT HISTORIC ROOF DRAINS MAY EXIST ALONG WEST WALLS.
- b. 1-1/2" INSULATION BOARD OVER ALL LOW-SLOPE ROOF c. TAPERED INSULATION TO PROVIDE A MINIMUM 1/4" PER FOOT SLOPE. d. INSTALL CANT STRIPS ALONG PARAPET WALLS, MODIFYING FOR DRAINAGE AT SCUPPERS.
- 7. INSTALL FLASHING, ROOF BOOTS, ROOF DRAINS, AND OTHER METAL AND ACCESSORIES AS
- APPROPRIATE DURING ROOFING INSTALLATION. FOLLOW MANUFACTURER'S INSTRUCTIONS.
- 8. EQUIPMENT CURBS: UNKNOWN EXISTING CURB TYPE. EXTENSIONS MAY BE NECESSARY TO ACCOMMODATE THE INSULATION.
- 9. INSTALL COMPLETE SINGLE PLY MEMBRANE ROOFING SYSTEM PER MANUFACTURER'S INSTRUCTIONS. a. EXTEND SYSTEM INTO AND ONTO SCUPPERS. b. CONDUIT SUPPORTS INSTALLED PER MANUFACTURERS RECOMMENDATIONS.
- 10. GUTTERS: GUTTERS ARE FOR SHINGLE ROOFS, BUT EXISTING GUTTER SYSTEM DRAINS ONTO LOW-SLOPE ROOF.
- a. REUSE EXISTING IF IN GOOD CONDITION, BUT RE-SLOPING MAY BE NECESSARY. REMOVE LATERAL CONNECTING PIPES. IF EXISTING GUTTERS ARE COPPER, PAINTING/COATING INSIDE OF GUTTERS NEEDED TO REDUCE CORROSION FROM FIRE RETARDANT.
- b. NEW GUTTERS TO MATCH EXISTING IN APPEARANCE, INCLUDING GUTTERS AT THE NEW LOCATIONS ON THE EAST SIDE OF THE BUILDING
- c. GUTTERS ABOVE LOW-SLOPE ROOF TO SLOPE TOWARDS SCUPPERS d. DOWNSPOUT LOCATIONS AS SHOWN ON PLANS, WITH KICK-OUTS TO DRAIN TOWARDS SCUPPERS LOCATIONS

e. SPLASH PADS UNDER DOWNSPOUT KICK-OUTS. SPLASHPADS ON LOW-SLOPE ROOF TO BE FIBERGLASS, RESIN, OR RUBBER. SPLASHPADS AT PATIO TO BE CONCRETE.

- 11. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS AND DETAILS. IF NOT AVAILABLE, REFER TO CSSB New Roof Construction Manual. A COPY OF THE CSSB MANUAL SHOULD BE KEPT ON
- 12. REMOVE EXISTING SHINGLES, UNDERLAYMENT, AND POSSIBLE NAILING LATH. REMOVE METAL FLASHINGS, TAKING CARE NOT TO DAMAGE STONE WALLS.
- 13. REMOVE ROTTED OR DAMAGED WOOD TO A MINIMUM OF ONE (1) FOOT BEYOND THE EDGES OF THE COMPROMISED WOOD AND TO THE NEXT RAFTER/JOIST. CUT STRAIGHT EDGES ALIGNED WITH THE RAFTERS BELOW, WITH EDGES SUPPORTED AND SECURED. ASSUME 10% REPLACEMENT.
- 14. INSTALL PLYWOOD OVER ENTIRE STEEP-SLOPED ROOFS. FASTEN AT ALL EDGES AND FIELD INTO RAFTERS BELOW. NO FASTENERS SHOULD PENETRATE ALL THE WAY THRU THE CEILING PLANKS.
- NOTE: INSTALL FLASHINGS AND OTHER METAL AND ACCESSORIES AS APPROPRIATE DURING UNDERLAYMENTS AND SHINGLE INSTALLATION. FOLLOW INSTRUCTION OF MANUFACTURER AND CSSB
- New Roof Construction Manual. 15. INSTALL COMPLETE UNDERLAYMENT SYSTEMS OVER ENTIRE PLYWOOD DECK. a. INSTALL WATER-AND-ICE DAM PROTECTION MEMBRANE AT EAVES, RAKES, RIDGES, HIPS, AND SIDEWALL LOCATIONS. ASPHALT IMPREGNATED FELT ON FIELD OF ROOFS AND LAP ONTO
- ICE-AND-WATER SHIELD. b. WRAP UNDERLAYMENT UP SIDE WALLS, TO APPROXIMATE HEIGHT OF THE STEP FLASHING, AND
- SEAL TO WALL W/ ASPHALT CEMENT.
- 16. INSTALL CEDAR BREATHER® VENTILATED UNDERLAYMENT SYSTEM.
- a. FOLLOW MANUFACTURER'S INSTRUCTIONS. SEE SHEET A2. b. INSTALL RAPID RIDGE®7 AT RIDGELINE OF ROOFS S1, S2, AND S3.
- 17. INSTALL COMPLETE WOOD SHINGLE ROOFING SYSTEM PER THE CSSB New Roof Construction
- a. DOUBLE ROW OF SHINGLES REQUIRED AT EAVES. b. SHINGLE EXPOSURES: 4"
- c. CUT SHINGLE LENGTH TO FIT AT RIDGE. CUT AT TOP OF SHINGLE, NOT THE BUTT END. d. STEP FLASHING ALONG WALLS IN CONJUNCTION WITH SHINGLE INSTALLATION. EXISTING STEP FLASHING IS INSERTED IN MORTAR. EXISTING STEP FLASHING MAY BE REUSED, IF POSSIBLE. DAMAGED MORTAR MUST BE RE-POINTED TO MATCH EXISTING.
- 18. METAL FLASHING, TRIM, AND OTHER METAL SURFACES DAMAGED DURING WORK TO RECEIVE

TOUCH-UP COATING BY BRUSH OR ROLLER. NO SPRAYING ALLOWED.

- G. CONSTRUCTION SITE: CONTRACTOR SHALL CONDUCT WORK 8:00 AM TO 5:00 PM, MONDAY - FRIDAY, UNLESS OTHER ARRANGEMENTS ARE MADE IN ADVANCE WITH THE PARK STAFF.
- 2. SITE SHALL BE CLEANED DAILY OF CONSTRUCTION TRASH AND LEFT IN A CLEAN ORDERLY MANNER. RUN MAGNET OVER SITE AND REMOVE ALL ERRANT FASTENERS. CONTRACTOR MUST PROVIDE DUMPSTER. LEGALLY DISPOSE OF WASTE OFF-SITE.

STORAGE AND PROTECTION OF MATERIALS:

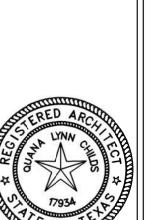
- THE O.D.R. IN COORDINATION WITH THE PARK SUPERINTENDENT SHALL DESIGNATE AN AREA NEAR THE WORK SITE FOR CONTRACTOR'S USE FOR THE STORAGE OF MATERIALS, SUPPLIES, AND EQUIPMENT.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER CARE AND PROTECTION OF ALL MATERIALS
- SUPPLIES, AND EQUIPMENT STORED ON THE JOB SITE. 3. ALL MATERIAL OR ITEMS DELIVERED TO THE JOB SITE MUST BE ADEQUATELY HOUSED OR OTHERWISE PROTECTED BY THE CONTRACTOR AGAINST DETERIORATION, DAMAGE, OR LOSS. ALL MATERIALS MUST BE STORED ON DUNNAGE AND NOT DIRECTLY ON THE GROUND. THE OWNER
- WILL NOT BE RESPONSIBLE FOR ANY DAMAGE OR LOSS OF SUCH STORED MATERIALS 4. CONTRACTOR SHALL ADEQUATELY PROTECT THE SITES AND BUILDINGS FROM DAMAGE DURING THE PERFORMANCE OF THE WORK. IF ANY DAMAGE OCCURS. CONTRACTOR SHALL, AT NO COST TO THE OWNER, MAKE REPAIRS TO OWNER'S SATISFACTION.

- CONTRACTOR SHALL EXERCISE PROPER PRECAUTIONS WHEN CONDUCTING WORK HEREIN. 2. CONTRACTOR SHALL FOLLOW ALL SAFETY RULES SET FORTH BY OSHA, STATE OF TEXAS, AND GOOD CONSTRUCTION PRACTICES.
- ALL STANDARD SAFETY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR 4. THE CONTRACTOR IS RESPONSIBLE FOR ENFORCING SAFETY FOR HIS EMPLOYEES AND COMPLYING WITH ANY ADDITIONAL PARK SAFETY REGULATIONS.

J. UNKNOWN CONDITIONS

IN THE EVENT UNKNOWN CONDITIONS ARE ENCOUNTERED WHICH DIFFER MATERIALLY FROM THE CONDITIONS SHOWN AND SPECIFIED HEREIN, TO INCLUDE BUT NOT LIMITED TO DETERIORATED MATERIALS, CONTRACTOR SHALL NOT PROCEED WITH ADDITIONAL WORK WITHOUT PROPER PRIOR WRITTEN AUTHORIZATION BY O.D.R.. ANY ADDITIONAL WORK AS DESCRIBED HERE SHALL BE AUTHORIZED BY CHANGE ORDER ONLY.





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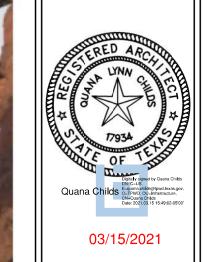
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SHEET TITLE SYMBOLS, NOTES **ABBREVIATIONS** SUBMITTAL TABLE &

SHEET NUMBER

SPECIFICATIONS

SHEET 1 OF 4



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DATE: 03/15/2021 DESIGNED BY: QC DRAWN BY: QC REVIEWED BY: REVISED:

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> SHEET TITLE **ROOF PLANS**

> > **PHOTOS**

SHEET NUMBER

SHEET 2 OF 4



LOW-SLOPE ROOF

VIEW FROM SOUTHEAST

- STONE BUTTRESS BELOW

DOWNSPOUT W/ KICK-OUT.

ANGLE SPLASH BLOCK TOWARDS DRAINAGE, AS APPROPRIATE, TYP.

- DASHED LINE INDICATES WALL BELOW.

- NEW GUTTERS AT NEW LOCATIONS

SHINGLE ROOFS (S1--S6)EXISTING SLOPE APPROX.

 PRESSURE—IMPREGNATED FIRE-RETARDANT CEDAR

SHINGLES. ALL METAL FLASHING IN

CONTACT WITH

PRE—FORMED METALS

RETARDANT.

FIRE-RETARDANT SHINGLES

MUST BE COATED METAL.

COATINGS: KYNAR 500 TO RESIST CORROSIVE FIRE

 SITE OR SHOP FORMED BARE METAL FLASHING MAY BE

COATED FLASHINGS, GUTTERS

DOWNSPOUTS TO DRAIN TO

SEE DETAILS ON SHEET A3.

DETAIL TAGS ON THIS SHEET

TYPICAL CONDITIONS.

√— STEPS TO TOWER

ROOF PLAN

AREAS, AND SLOPES.

SCALE: APPROX \(\frac{1}{8} = 1' - 0'' \)
CONTRACTOR TO VERIFY ALL DIMENSIONS,

DOWNSPOUT AND SPLASHPAD LOCATIONS,

MAY NOT BE AT EVERY

LOCATION, AND REFER TO

TO SPLASH PADS.

COLOR AT SITE.

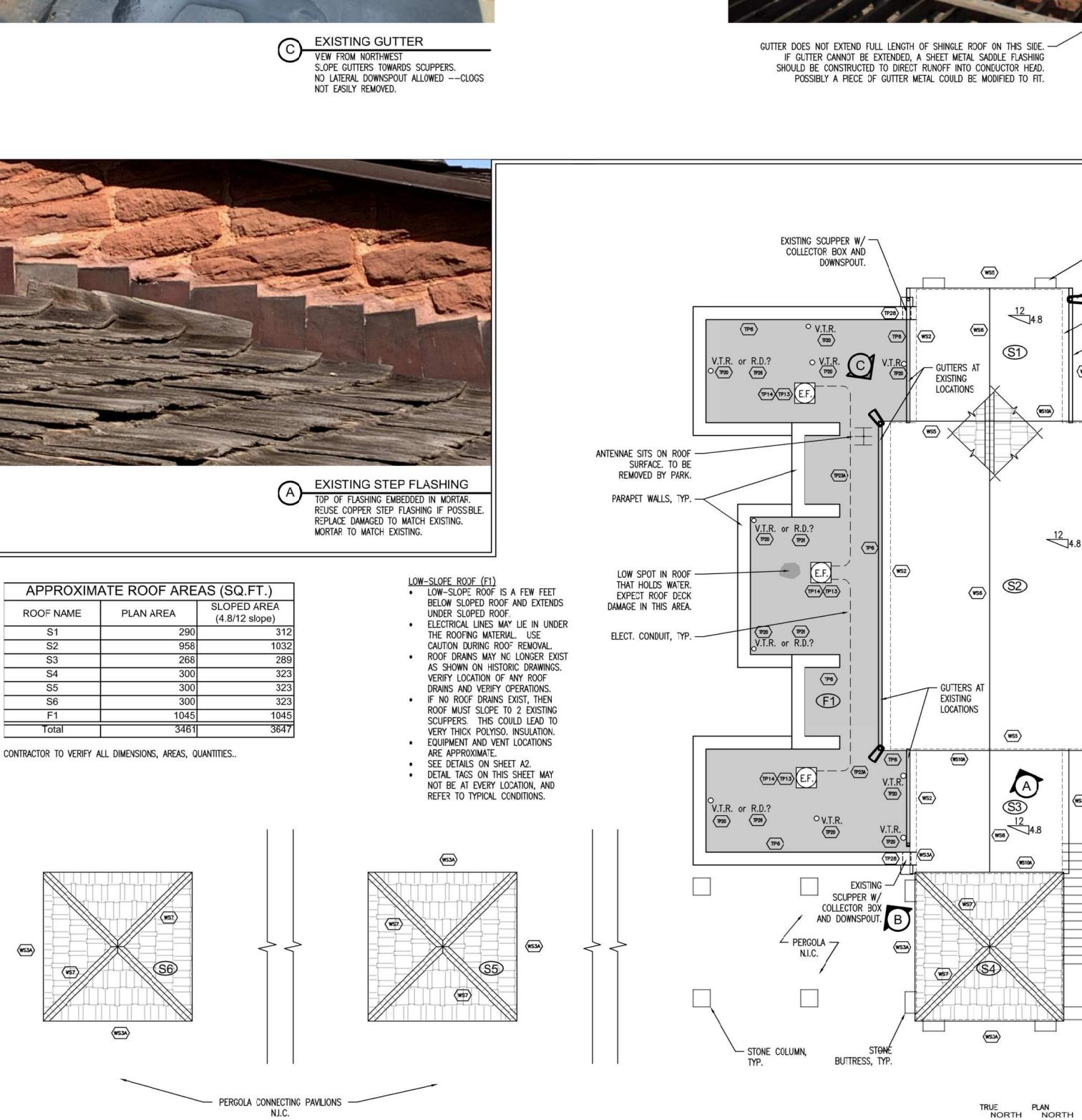
& DOWNSPOUTS TO MATCH

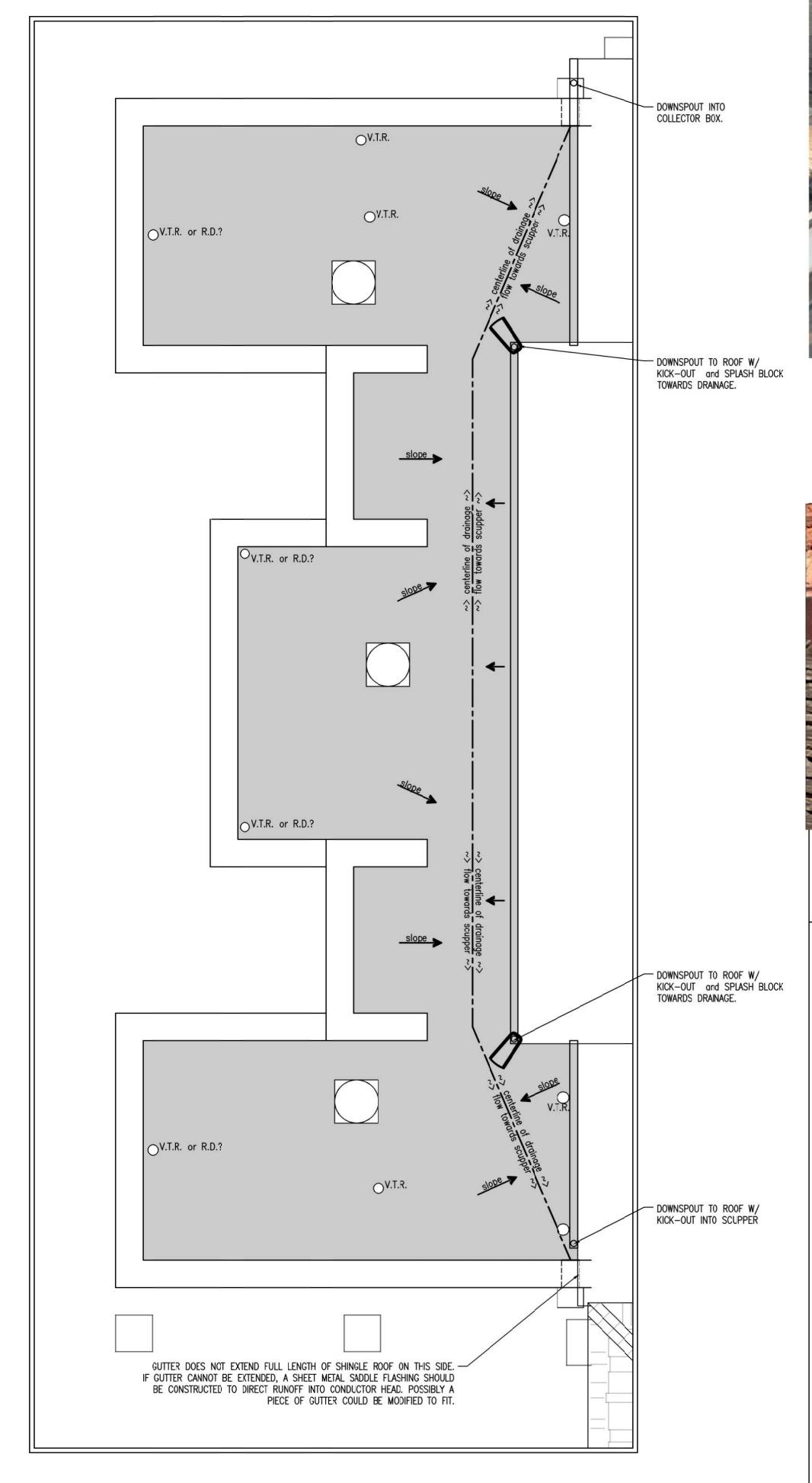
COATED WITH A DTM ACRYLIC

OR RUNOFF FROM SHINGLES

THIS APPEARS TO BE A VENT, — BUT ORIGINAL DRAWINGS SHOW THIS AS A ROOF DRAIN. SIMILAR PIPES EXIST ALONG THE WEST WALLS.



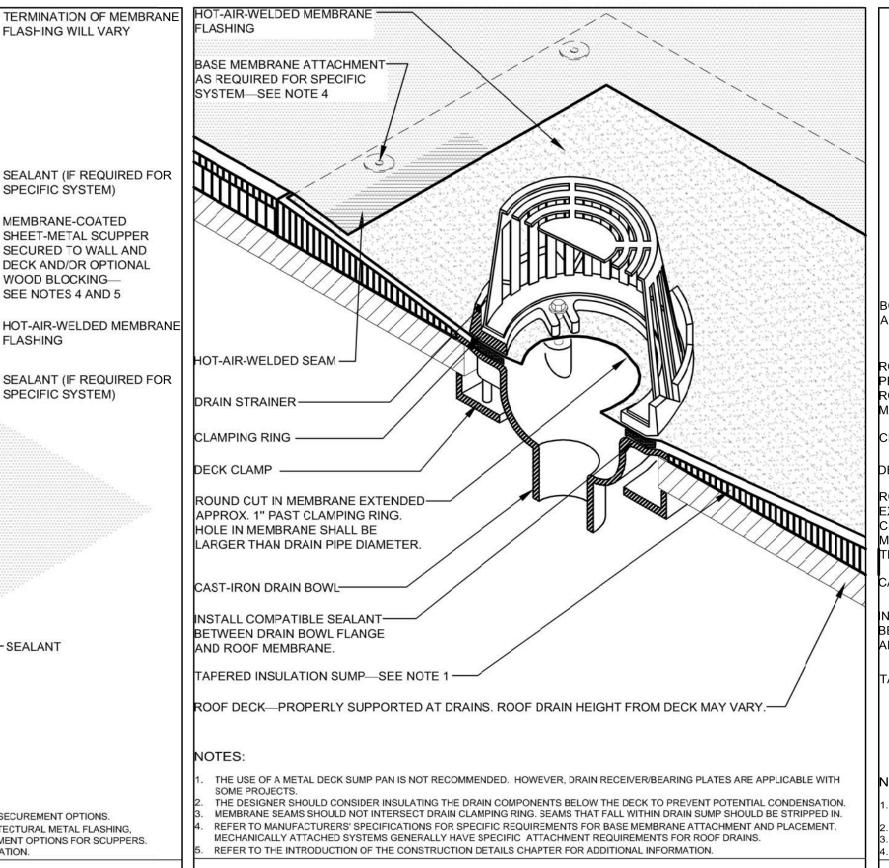




LOW-SLOPE DRAINAGE PLAN SCALE: APPROX 1"=1'-0" CONTRACTOR TO VERIFY ALL DIMENSIONS, AREAS, AND SLOPES.

TPWD NOTE: EXISTING SCUPPER APPEARS TO BE A SECTION OF CLAY PIPE. THE PIPE IS HISTORIC AND IS TO REMAIN IN PLACE. SCUPPERS MAY BE THE ONLY DRAINAGE FOR ROOF.

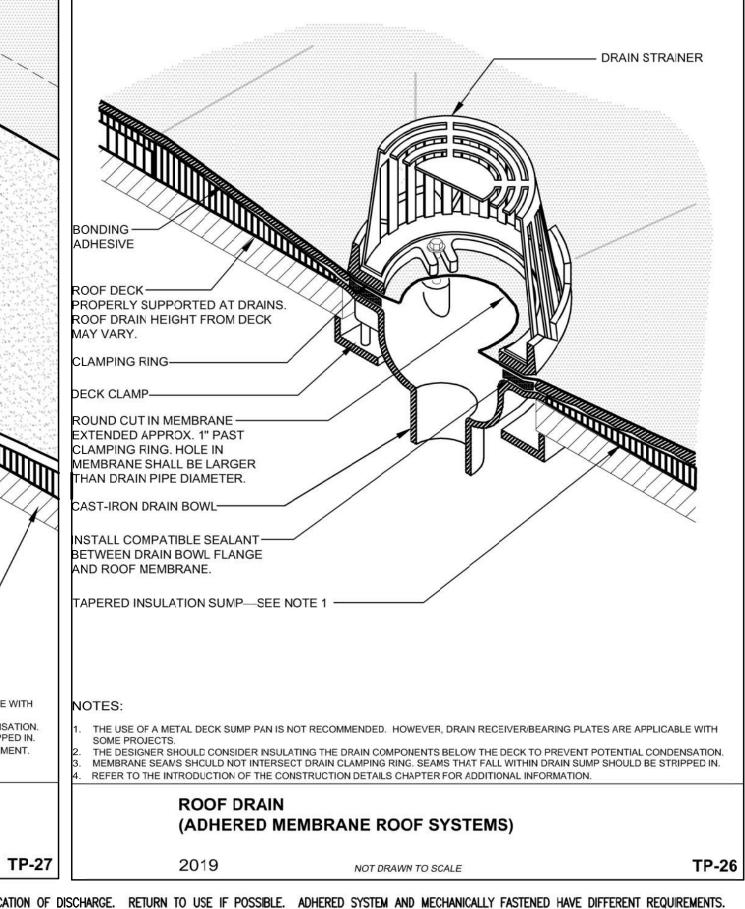
NOT DRAWN TO SCALE



(MECHANICALLY ATTACHED MEMBRANE ROOF SYSTEMS)

NOT DRAWN TO SCALE

2019



MEMBRANE PROTECTION-PLY ADHERED TO ROOF MEMBRANE PIPE SUPPORT-SET IN SEALANT—SEE NOTE 2 THIS DETAIL IS DESIGNED TO ELIMINATE ROOF DAMAGE DUE TO EXPANSION AND CONTRACTION OF PIPES. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION. PIPE SUPPORT NOT DRAWN TO SCALE

PIPE SUPPORT PROFILES VARY. REFER TO THE MANUFACTURER FOR LOAD CAPACITY AND RECOMMENDED SPACING OF SUPPORTS. TP-23A

CONCRETE FASTENERS

SEE NOTES 3 AND 4

INSTALL COMPRESSIBLE

ELASTOMERIC SEALANT OR

APPROPRIATE FASTENERS

OR TAPE BEHIND MEMBRANE

APPROX. 12" O.C.

BONDING ADHESIVE

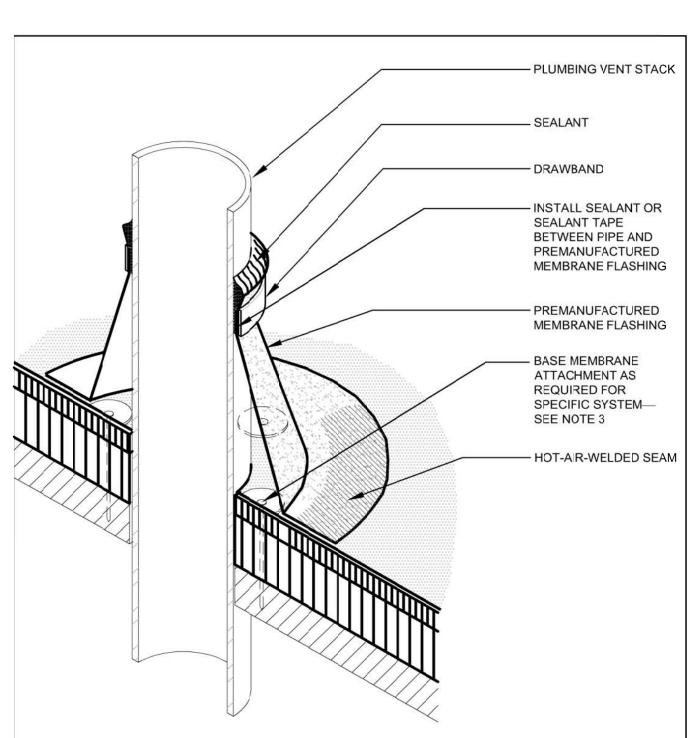
SEE NOTE 2

- HOT-AIR-WELDED SEAM

SEALANT (IF REQUIRED FOR THE SPECIFIC SYSTEM)

SEAM PLATES AND FASTENERS—

TPWD NOTE: HISTORIC DRAWINGS SHOW ROOF DRAINS. IF THEY CAN BE FOUND, DETERMINE OPERATIONS AND LOCATION OF DISCHARGE. RETURN TO USE IF POSSIBLE. ADHERED SYSTEM AND MECHANICALLY FASTENED HAVE DIFFERENT REQUIREMENTS. FOLLOW SPM MANUFACTURERS DETAILS ACCORDINGLY.



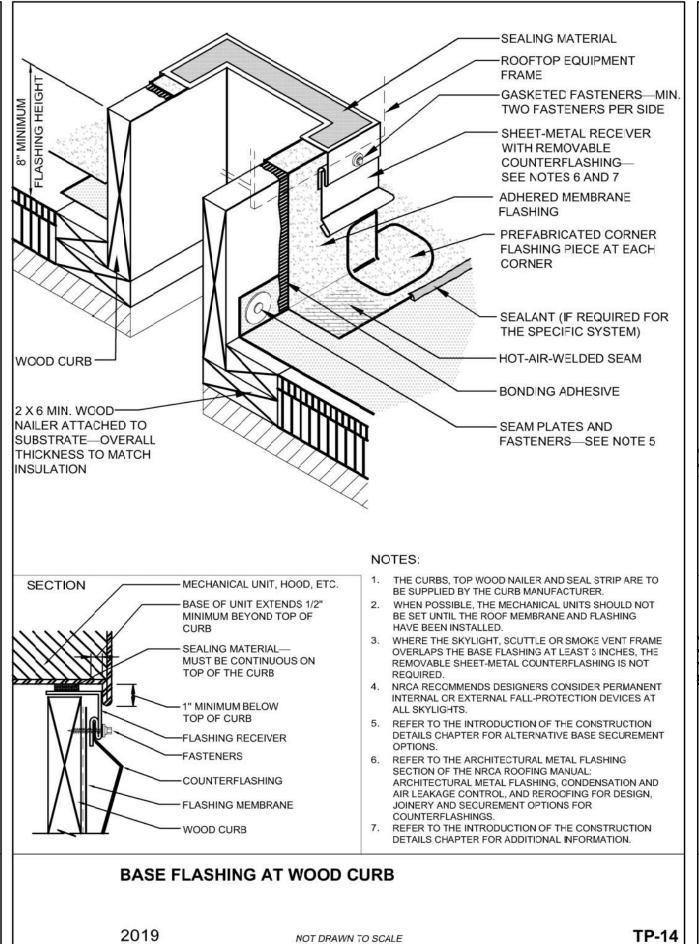
- 1. VENT STACKS AND OTHER PIPES SHOULD HAVE A MINIMUM OF 12 INCHES OF CLEARANCE ON ALL SIDES FROM WALLS, CURBS AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING. SEE THE INTRODUCTION TO THE CONSTRUCTION DETAILS FOR ADDITIONAL
- 2. NRCA RECOMMENDS FLASHINGS BE 8 INCHES HIGH; HOWEVER, NRCA IS AWARE PREMANUFACTURED BOOT FLASHINGS GENERALLY WILI NOT MEET THE HEIGHT REQUIREMENT
- 3. REFER TO MANUFACTURERS' SPECIFICATIONS FOR SPECIFIC REQUIREMENTS FOR BASE MEMBRANE ATTACHMENT AND PLACEMENT. MECHANICALLY ATTACHED SYSTEMS GENERALLY HAVE SPECIFIC ATTACHMENT REQUIREMENTS FOR PENETRATION LOCATIONS.

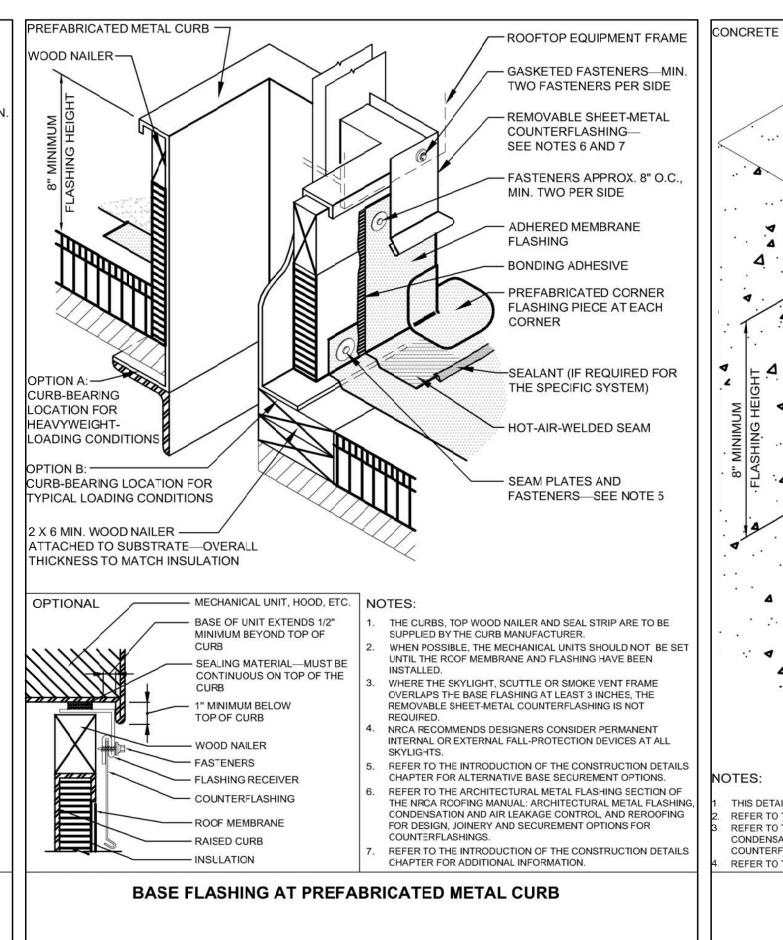
 4. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

PLUMBING VENT [PREMANUFACTURED BOOT]

NOT DRAWN TO SCALE

TP-20





NOT DRAWN TO SCALE TPWD NOTE: EXISTING CURBS MAY BE WOOD, PRE-FABRICATED METAL, OR A COMINATION OF THE TWO. SELECT DETAIL ACCORDINGLY.

MECHANICALLY FASTEN TO STONE.

THIS DETAIL DOES NOT ALLOW FOR DIFFERENTIAL MOVEMENT BETWEEN THE DECK AND WALL.

REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

TPWD NOTE: THESE ARE STONE WALLS, NOT CONCRETE. INSERT MECHANICAL FASTENERS INTO MORTAR ONLY. DO NOT

REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ALTERNATIVE BASE SECUREMENT OPTIONS.

CONDENSATION AND AIR LEAKAGE CONTROL, AND REROOFING FOR DESIGN, JOINERY AND SECUREMENT OPTIONS FOR

REFER TO THE ARCHITECTURAL METAL FLASHING SECTION OF THE NRCA ROOFING MANUAL: ARCHITECTURAL METAL FLASHING,

BASE FLASHING WITH SURFACE-MOUNTED COUNTERFLASHING AT

LOW-SLOPE ROOF DETAILS

CONCRETE WALL

TP-13

DETAILS BY THE NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA) FOR REFERENCE. USE MANUFACTURER'S DETAILS WHEN POSSIBLE.

NOT DRAWN TO SCALE

-INSTALL APPROPRIATE SEALANT (E.G., POLYURETHANE) AND TOOL TO FACILITATE WATER RUNOFF SHEET-METAL COUNTERFLASHING-MPL 0 TAPE TO SPAN IRREGULARITIES TERMINATION BAR FASTENED WITH - INSTALL COMPATIBLE SEALANT - ADHERED MEMBRANE FLASHING

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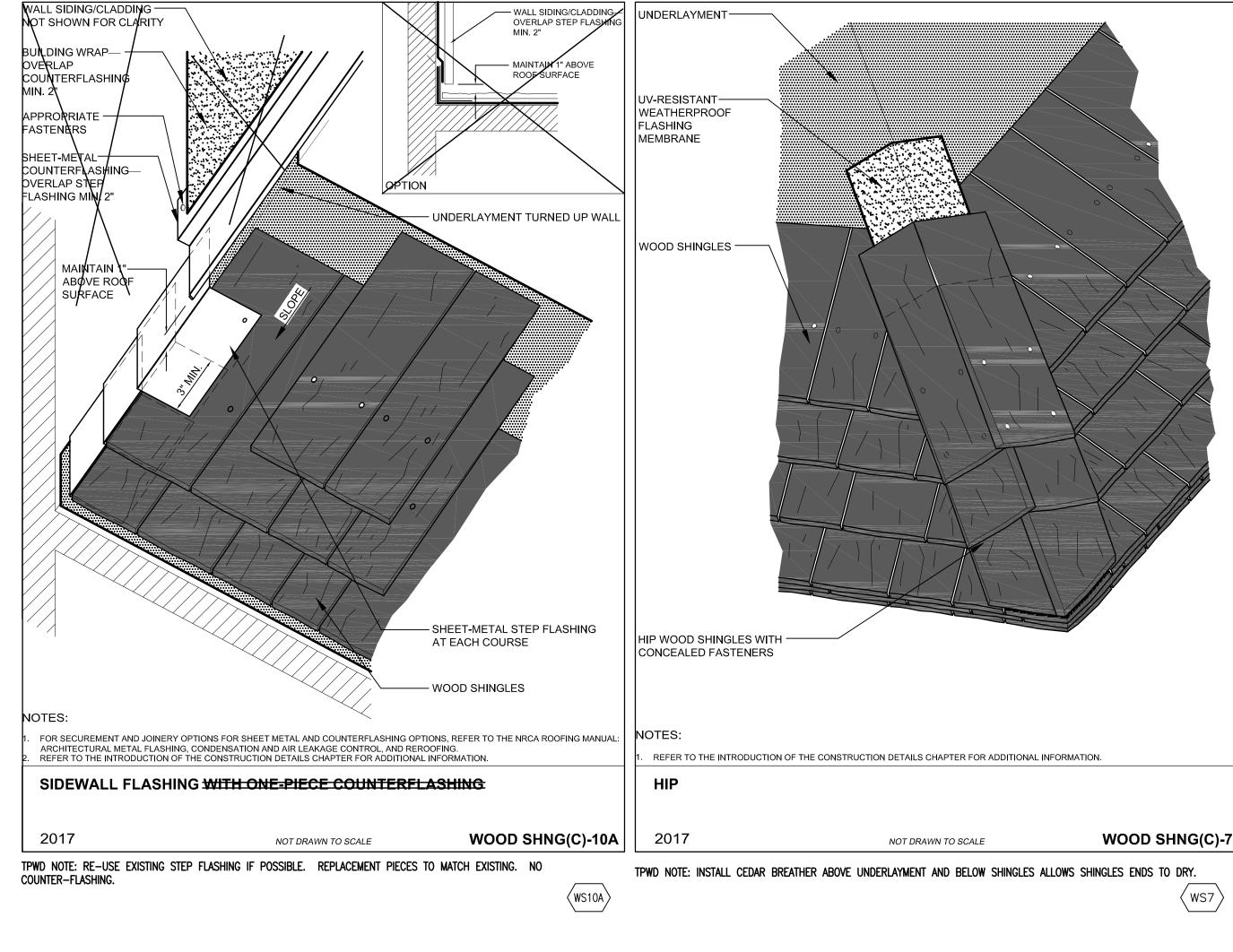
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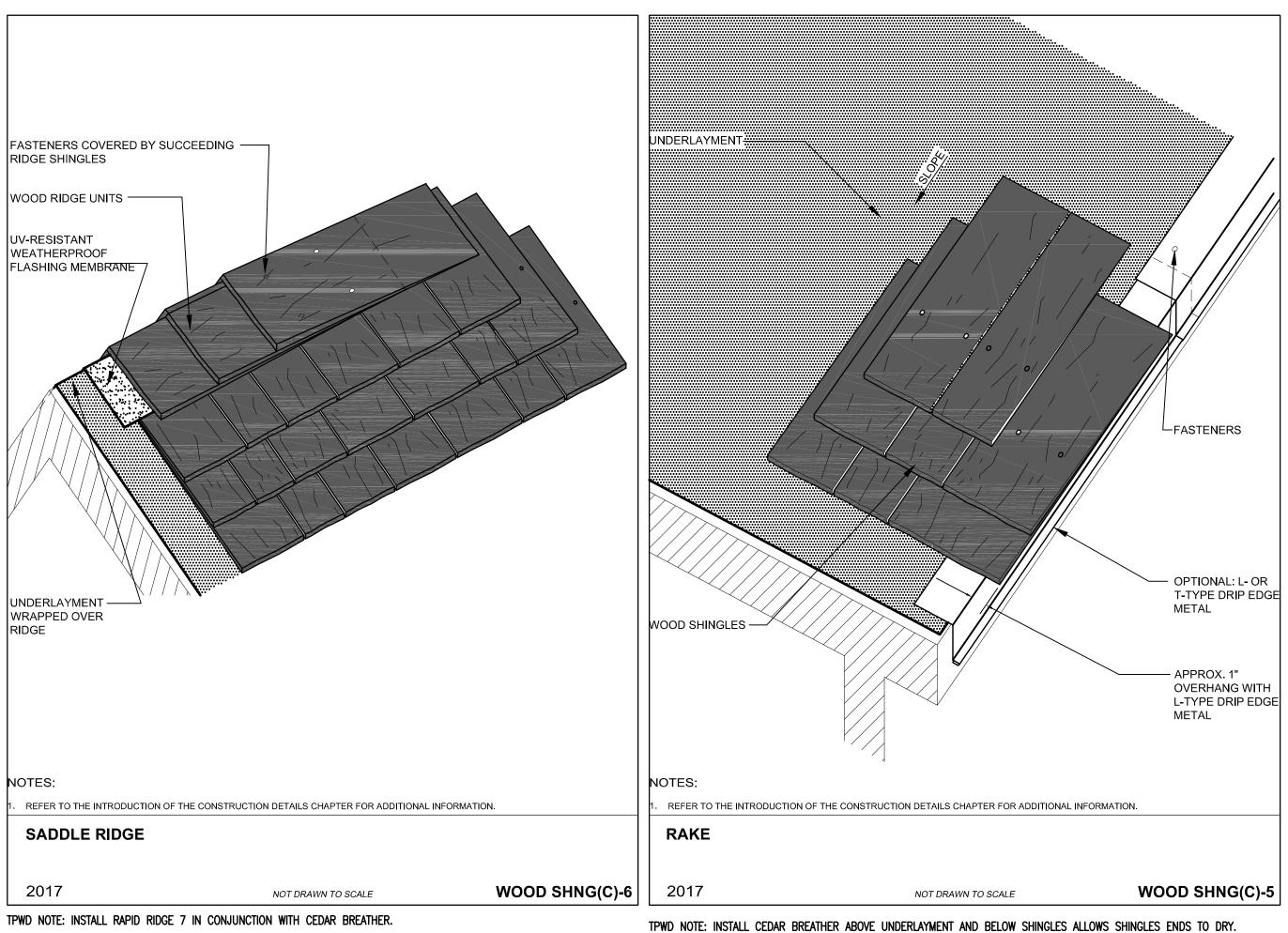
SHEET TITLE SINGLE PLY **MEMBRANE DETAILS**

TP-6

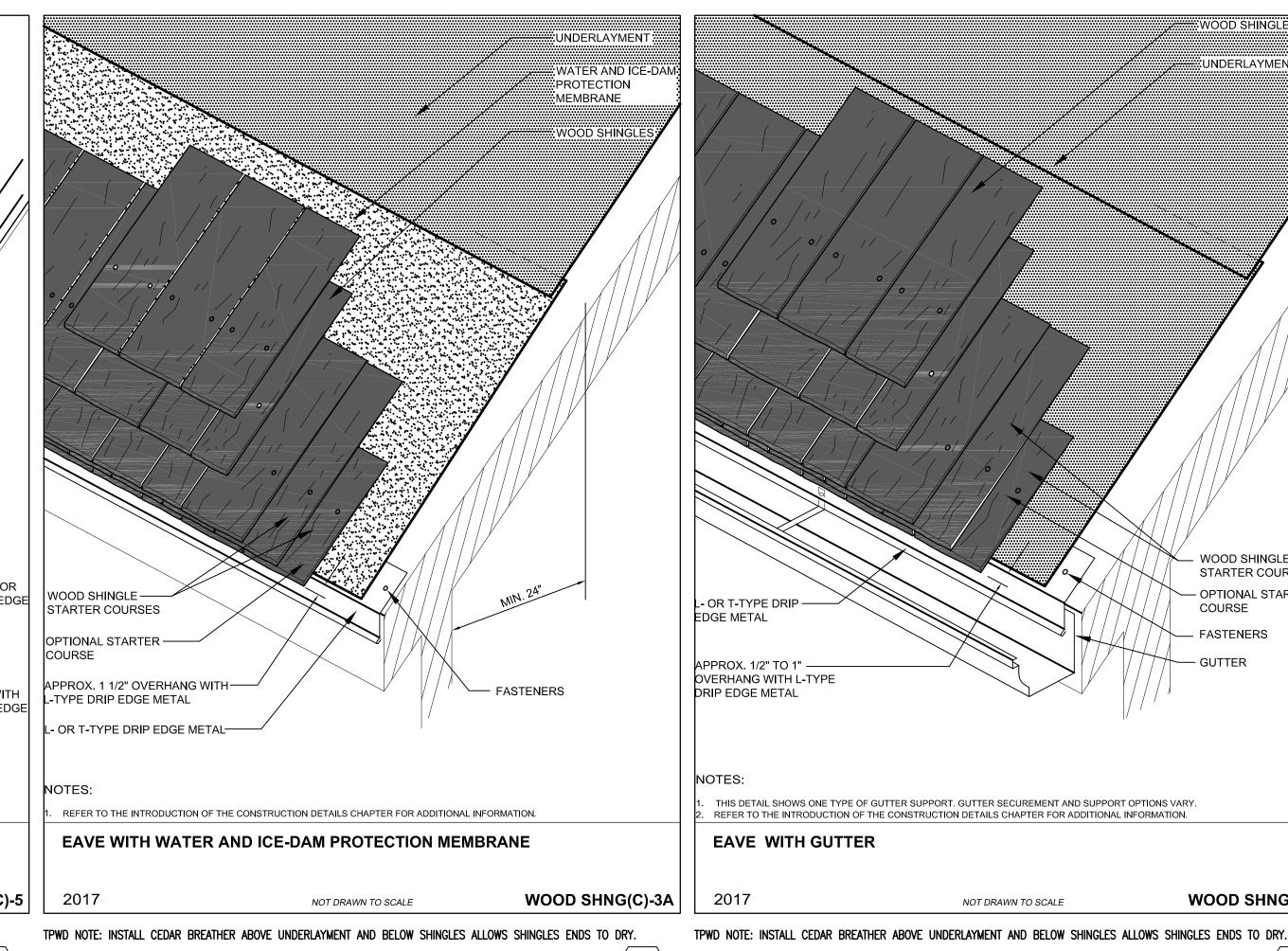
SHEET NUMBER SHEET 3 OF 4



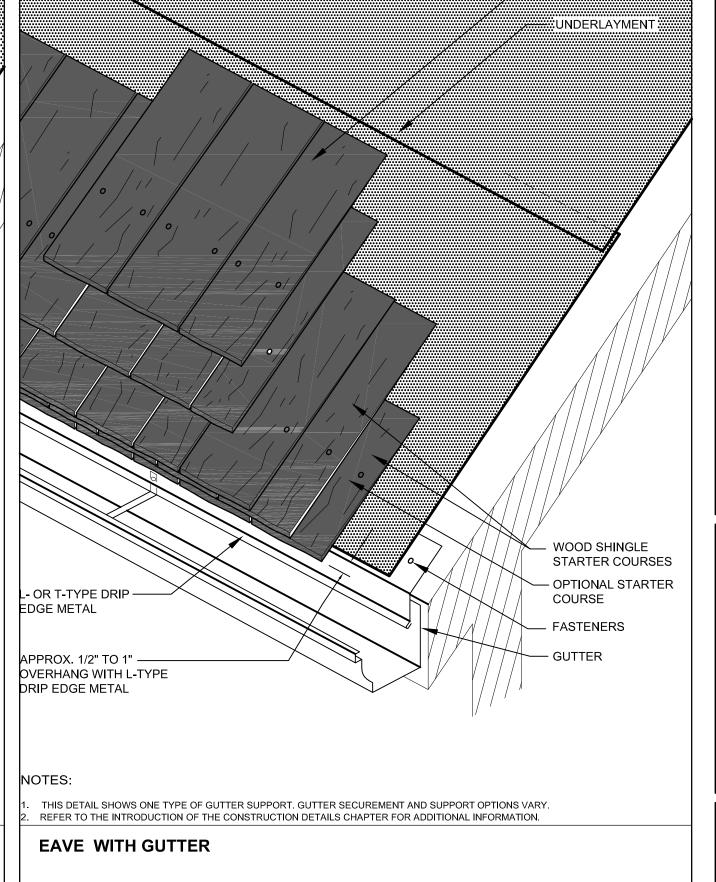
TPWD NOTE: ROOF DECK IS WOOD PLANK VISIBLE FROM BELOW. ADD LAYER OF PLYWOOD DECKING TO PREVENT ROOFING NAILS POPPING THRU CEILING BELOW. CEDAR BREATHER ABOVE UNDERLAYMENT AND BELOW SHINGLES ALLOWS SHINGLES ENDS TO DRY.



 $\langle WS6 \rangle$



(WS5)



₩₩₩WOOD SHINGLES S ENE OMPLI 70 DATE: 03/15/2021 DESIGNED BY: QC DRAWN BY: QC REVIEWED BY: REVISED: REVISED: (13A) REVISED:

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SHEET TITLE SHINGLE

SHEET NUMBER

SHEET 4 OF 4

(WS3A)

NOT DRAWN TO SCALE